

GP-302180

GENERALIZED ELECTROCHEMICAL CELL STATE AND PARAMETER ESTIMATOR

ABSTRACT OF THE DISCLOSURE

A method of estimating a state of charge (SOC) and a state of health (SOH) of an electrochemical cell (EC) includes modeling the EC with a linear equation, measuring a terminal current of the EC, measuring a terminal voltage of the EC and measuring a temperature of the EC. The linear equation is processed through a time-varying state and parameter estimator based on the terminal current, the terminal voltage and the temperature to determine states and parameters of the EC.